6,387,531 entitled "Metal (Silicon) Oxide/Carbon Composite Particles," incorporated herein by reference. The incorporation of lithium from a lithium salt into metal oxide nanoparticles in a heat treatment process is described in copending and commonly assigned U.S. Patent Application Serial No. 09/311,506, now U.S. Patent 6,394,494 to Reitz et al., entitled "Metal Vanadium Oxide Particles," and copending and commonly assigned U.S. Patent Application Serial No. 09/334,203 to Kumar et al., entitled "Reaction Methods for Producing Ternary Particles," both of which are incorporated herein by reference.

B1 Cont'd

At page 30, lines 9-19, please replace the paragraph with the following. This paragraph was previously amended in the Amendment of October 18, 2001.

In particular, the production of vanadium oxide nanoparticles is described in copending and commonly assigned U.S. Patent Applications Serial No. 08/897,778, now U.S. Patent 6,106,798 to Bi et al., entitled "Vanadium Oxide Nanoparticles," incorporated herein by reference. Similarly, silver vanadium oxide nanoparticles have been produced, as described in copending and commonly assigned U.S. Patent Applications Serial Nos. 09/246,076, now U.S. Patent 6,225,007, and 09/311,506, now U.S. Patent 6,394,494, both entitled "Metal Vanadium Oxide Particles," both of which are incorporated herein by reference.

B2

At page 31, lines 14-32, please replace the paragraph with the following.

The production of titanium oxide nanoparticles is described in copending and commonly assigned, U.S. Patent Application Serial Number 09/123,255, now U.S. Patent 6,387,531 to Bi et al., entitled "Metal (Silicon) Oxide/Carbon Composites," incorporated herein by reference. In particular, this application describes the production of anatase and rutile TiO_2. The production of

B3

aluminum oxide nanoparticles is described in copending and commonly assigned, U.S. Patent Application Serial Number 09/136,483 to Kumar et al., entitled "Aluminum Oxide Particles," incorporated herein by reference. In particular, this application disclosed the production of γ-Al_2O_3. Suitable liquid, aluminum precursors with sufficient vapor pressure of gaseous delivery include, for example, aluminum s-butoxide ($Al(OC_4H_9)_3$). Also, a number of suitable solid, aluminum precursor compounds are available including, for example, aluminum chloride ($AlCl_3$), aluminum ethoxide ($Al(OC_2H_5)_3$), and aluminum isopropoxide ($Al[OCH(CH_3)_2]_3$).

At page 32, lines 10-27, please replace the paragraph with the following. This paragraph was previously amended in the Amendment of October 18, 2001.

The production of iron and iron carbide is described in a publication by Bi et al., entitled "Nanocrystalline α-Fe, Fe_3C, and Fe_7C_3 produced by CO_2 laser pyrolysis," J. Mater. Res. Vol. 8, No. 7 1666-1674 (July 1993), incorporated herein by reference. The production of iron oxide nanoparticles is described in copending and commonly assigned U.S. Patent Application serial number 09/337,826, now U.S. Patent 6,080,337 to Kambe et al., entitled "Iron Oxide Particles," incorporated herein by reference. The production of nanoparticles of silver metal is described in copending and commonly assigned U.S. Patent Application Serial Number 09/311,506, now U.S. Patent 6,394,494 to Reitz et al., entitled "Metal Vanadium Oxide Particles," incorporated herein by reference. Nanoscale carbon particles produced by laser pyrolysis are described in a reference by Bi et al., entitled "Nanoscale carbon blacks produced by CO_2 laser pyrolysis," J. Mater. Res. Vol. 10, No. 11, 2875-2884 (Nov. 1995), incorporated herein by reference.

At page 33, lines 10-27, please replace the paragraph with the following.

The production of ternary nanoparticles of aluminum silicate and aluminum titanate can be performed by laser pyrolysis following procedures similar to the production of silver vanadium oxide nanoparticles described in copending and commonly assigned U.S. Patent Application Serial Number 09/311,506, now U.S. Patent 6,394,494 to Reitz et al., entitled "Metal Vanadium Oxide Particles," incorporated herein by reference. Suitable precursors for the production of aluminum silicate include, for vapor delivery, a mixture of aluminum chloride ($AlCl_3$) and silicon tetrachloride ($SiCl_4$) and, for aerosol delivery, a mixture of tetra(N-butoxy) silane and aluminum isopropoxide ($Al(OCH(CH_3)_2)_3$). Similarly, suitable precursors for the production of aluminum titanate include, for aerosol delivery, a mixture of aluminum nitrate ($Al(NO_3)_3$) and titanium dioxide (TiO_2) powder dissolved in sulfuric acid or a mixture of aluminum isopropoxide and titanium isopropoxide ($Ti(OCH(CH_3)_2)_4$).

In the Claims

Please cancel claims 2, 3, 30-40 without prejudice or disclaimer.

Please substitute the following amended claims for those currently pending:

1. (Amended) A material having a layer, the layer comprising a plurality of self-assembled structures comprising compositions, wherein the structures are localized in separate, selected islands covering a portion of the layer in an integrated assembly and wherein the compositions comprise inorganic particles.

4. (Amended) The material of claim 1 wherein the inorganic particles have an average secondary particle diameter from about 2 nm to about 200 nm.

5. (Amended) The material of claim 1 wherein the inorganic particles have an average secondary particle diameter less than about 100 nm and the primary particles having a distribution